

REMARKS

Claims 1, 29, 33 and 41 have been amended to address the Examiner's 112 rejection and to make clear that the limitations of the claims are structural limitations, as well as to better define the claimed invention and to better distinguish the claimed invention over the prior art. In particular, independent claims 1, 29 and 33 have been amended to recite, in part, at least two spatially separated sources of "mutually orthogonally polarized beams of light ("wavefronts" in claim 32, two polarized beams in claim 41), which are spatially displaced with respect to each other as they are provided to [at least] a reference object and a test object" Support for the amendments can be found throughout Applicants' originally filed disclosure, for example at page 8, line 24-page 9, line 2; and Figures 1 and 4. Moreover, it is respectfully submitted that the claims, as amended, overcome the rejection under 35 U.S.C. § 112. No new matter has been entered.

Turning to the art rejections, and considering first the rejection of claims 1, 3-11, 13, 14, 16-21, 26-33, 35, 40 and 41 under 35 U.S.C. § 102(b) as being anticipated by Kuchel (U.S. Patent No. 4,872,755), amended independent claims 1, 29 and 33, and 41 each require, in part, "mutually orthogonally polarized beams of light ("wavefronts" in claim 32, two polarized beams in claim 41), which are spatially displaced with respect to each other as they are provided to [at least] a reference object and a test object" It is respectfully submitted that Kuchel fails to teach or suggest at least these features of independent claims 1, 29, 33, and 41.

Nowhere within its four corners does Kuchel provide any teaching or suggestion of at least two sources for mutually orthogonally polarized beams (or wavefronts) of light, which are spatially displaced with respect to each other as they are provided to the reference object and the test object as required by independent claims 1, 29, 33 and 41. Kuchel teaches an

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interferometer containing “at least one optical delay device” for creating interference between particular beams with differing optical path lengths. Kuchel, col. 2, lines 47-52 and col. 4, lines 47-53. Even if the Examiner’s characterization of Kuchel is correct in teaching that beams are momentarily spacially separated, Kuchel’s delay device Kuchel fails to teach or suggest spatial displacement as the beams are provided to the test object and the reference object. Instead, Kuchel teaches that all light rays emanating from the light source follow an identical spatial path with some light from each beam additionally traversing one or both of path difference $2nV_1$ and air gap $2nL_1$. See Col. 4, lines 20-27; Fig. 6. For this reason alone, independent claims 1, 29, 33 and 41 cannot be said to be anticipated by Kuchel.

For at least the foregoing reasons, it is respectfully submitted that Kuchel cannot be said to anticipate or for that matter render obvious any of Applicants’ independent claims 1, 29, 33 or 41. Claims 3-11, 13, 14, 16-21, 26-28, 30-32, 35, 40, and new claim 42 all depend from one of independent claims 1, 29 or 33, as the case may be, and are therefore allowable over Kuchel for at least those reasons adduced above relative to the independent claims, as well as for their own additional limitations.

Turning next to the rejection of claims 12, 15, 16 and 22-25 under 35 U.S.C. § 103(a) as being unpatentable over Kuchel as applied to their respective independent claim or as applied to claims 1 and 33, each of claims 12, 15, 16 and 22-25 depend upon independent claim 1. The deficiencies of Kuchel with respect to independent claim 1 are discussed above. It is respectfully submitted that claims 12, 15, 16 and 22-25 are allowable over Kuchel for the same reasons adduced above relative to claim 1, as well as for their own additional limitations.

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Having dealt with all the objections raised by the Examiner, the Application is believed to be in order for allowance. Early and favorable action is respectfully requested.

RCE fees and extra claim fees are being paid via EFS-WEB in the amount of \$431.00.

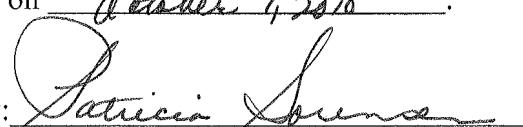
In the event there are any fee deficiencies or additional fees are payable, please charge them (or credit any overpayment) to our Deposit Account Number 08-1391.

Respectfully submitted,


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